Supplementary Materials

Hollow Co$_9$S$_8$ rods-acidified CNT-NiCoLDH composite enabling excellent electrochemical performance in asymmetric supercapacitors

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Supplementary figures

**Fig. S1** Schematic diagram of Ke-Kendal effect.
**Fig. S2** SEM images of (a) CNTs, (b) aCNTs, (c) Co$_9$S$_8$-aCNT (low), (d) Co$_9$S$_8$-aCNT (high), (e) NiCoLDH.

**Fig. S3** TEM image of NiCoLDH.
**Fig. S4** a-j CV curves and GCD curves of (a, b) Co₉S₈, (c, d) NiCoLDH, (e, f) Co₉S₈-aCNT, (g, h) Co₉S₈-aCNT (low) and (i, g) Co₉S₈-aCNT (high).

**Fig. S5** Comparison of (a) CV curve, (b) GCD curves and (c) specific capacitance of Co₉S₈-aCNT (low), Co₉S₈-aCNT (high) and Co₉S₈-aCNT.
Fig. S6 Cycling performance of Co9S8-aCNT-NiCoLDH electrodes after 5000 cycles at 10 A g\(^{-1}\).

Fig. S7 GCD curves of active carbon (AC) at 1 A g\(^{-1}\)